

Title (en)

METHOD FOR DETERMINING BLOCK VECTORS FOR ESTIMATING MOTION

Title (de)

VERFAHREN ZUR BESTIMMUNG VON BLOCKVEKTOREN FÜR DIE BEWEGUNGSSCHÄTZUNG

Title (fr)

PROCEDE DE DETERMINATION DE VECTEURS BLOCS DESTINE A L'EVALUATION DE MOUVEMENTS

Publication

**EP 1019871 A2 20000719 (DE)**

Application

**EP 98958186 A 19980924**

Priority

- DE 9802935 W 19980924
- DE 19744134 A 19970929

Abstract (en)

[origin: DE19744134A1] During digital video signal processing, the knowledge of position and time modifications in the recorded scene is utilized for data compression and format conversion. In general, expensive computer circuits are necessary for conducting high-precision estimation of motion. The inventive hybrid method comprises simple measures which can be clearly executed and provide a low-cost high-precision estimation of motion. According to the invention, a block vector BV is generated in a number of steps for each block. To begin with, a first modified block matching occurs in order to select a start vector SV from a number of vector candidates VCi. The start vector SV is then refreshed by pixel recursion and used as an additional start vector VCi+1. Finally, a block matching resulting from coordinating the first and second steps in a third step produces the final block vector BV. The block vectors BV are read out for a successive generating of a dense motion vector field and for new vector candidates VCi which are to be intermediately stored.

IPC 1-7

**G06T 7/20**

IPC 8 full level

**G06T 7/20** (2006.01); **G06T 7/238** (2017.01); **H04N 7/26** (2006.01); **H04N 19/43** (2014.01); **H04N 19/523** (2014.01); **H04N 19/533** (2014.01); **H04N 19/56** (2014.01)

CPC (source: EP)

**G06T 7/238** (2016.12); **H04N 19/43** (2014.11); **H04N 19/523** (2014.11); **H04N 19/533** (2014.11); **H04N 19/56** (2014.11); **G06T 2207/10016** (2013.01)

Citation (search report)

See references of WO 9917256A2

Cited by

US11328432B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**DE 19744134 A1 19990401**; DE 59805341 D1 20021002; EP 1019871 A2 20000719; EP 1019871 B1 20020828; WO 9917256 A2 19990408; WO 9917256 A3 19990617

DOCDB simple family (application)

**DE 19744134 A 19970929**; DE 59805341 T 19980924; DE 9802935 W 19980924; EP 98958186 A 19980924